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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 9281 GP-302652 10/739,435 12/18/2003 Anil K. Sachdev EXAMINER 7590 12/03/2004 ALI, HYDER KATHRYN A MARRA **General Motors Corporation** PAPER NUMBER ART UNIT Legal Staff, Mail Code 482-C23-B21 P.O. Box 300 3747 Detroit, MI 48265-3000 DATE MAILED: 12/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)	
Office Action Summary		10/739,435	SACHDEV ET AL.	
		Examiner	Art Unit	
		HYDER ALI	3747	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).				
Status				
1)□	Responsive to communication(s) filed on			
2a)□	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.		
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims				
4)🛛	☑ Claim(s) <u>1-25</u> is/are pending in the application.			
•	4a) Of the above claim(s) is/are withdrawn from consideration.			
5)🖾	Claim(s) <u>13-25</u> is/are allowed.			
	Claim(s) <u>1-12</u> is/are rejected.			
•	Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.				
Application Papers				
9)☐ The specification is objected to by the Examiner.				
10)⊠ The drawing(s) filed on <u>18 December 2003</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da		
3) X Inform	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) ' No(s)/Mail Date 12/18/03.		Patent Application (PTO-152)	

#### **DETAILED ACTION**

## Inventorship

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Abe et al (US 4,245,595).

As to Claim 1, Abe et al discloses a modular engine assembly comprising: a cylinder bore block 62; a cylinder head 60 disposed above said cylinder bore block 62; and a crankcase assembly 70 disposed below said cylinder bore block, wherein said crankcase assembly 70 comprises an upper carrier 74 and a lower carrier 76 each

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having a plurality of bearing portions 84,82 therein being integral, unitary, and onepiece.

As to Claim 2, Abe et al discloses cylinder bore block 62 is a shape that can be made from one of a casting, molding, shaping, and extrusion from one of a group of materials comprising cast iron, aluminum, magnesium, or those materials with surface treatment.

As to Claim 3, Abe et al discloses upper carrier 74 is a shape that can be made from one of a casting, molding, shaping, extrusion from one of a group of materials comprising cast iron, aluminum, magnesium, or those materials with surface treatment.

As to Claim 4, Abe et al discloses lower carrier 76 is a shape that can be made from one of a casting, molding, shaping, or extrusion from one a group materials comprising cast iron, aluminum, magnesium, or those materials with surface treatment.

As to Claim 5, Abe et al discloses each of said bearing portions has a recess forming a support surface.

As to Claim 6, Abe et al discloses upper carrier has a cavity therein and said bearing portions being disposed in said cavity and spaced longitudinally there along.

As to Claim 7, Abe et al discloses lower carrier has a cavity therein and said bearing portions being disposed in said cavity and spaced longitudinally there along.

As to Claim 8, Abe et al discloses upper carrier has a plurality of cylinder bore apertures extending there through.

As to Claim 9, Abe et al discloses upper carrier has a plurality of first fastener apertures extending there through.

As to Claim 10, Abe et al discloses lower carrier has a plurality of second fastener apertures therein.

As to Claim 11, Abe et al discloses a plurality of fasteners 78 extending through said first fastener apertures and into said second fastener apertures to secure said upper carrier and said lower carrier together.

As to Claim 12, Abe et al discloses a crankshaft 72 assembly disposed between said upper carrier and said lower carrier.

### Allowable Subject Matter

Claims 13-25 are allowed.

#### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The reference by Putnam et al and Han both disclose crankshaft supporting structure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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